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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,738	03/18/2004	Masao Shimada	043034-0181	5355
22428 7590 04/11/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
JEAN, FRANTZ B				
ART UNIT		PAPER NUMBER		
2154				
MAIL DATE		DELIVERY MODE		
04/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/802,738

Applicant(s)

SHIMADA, MASAO

Examiner

Frantz B. Jean

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to applicants' response filed on 01/07/08. Claims 1-16 are pending in the application.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:.

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21 (2) of such treaty in the English language.

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Choi et al. hereinafter Choi US patent Number 7;181,503.

As per claim 1, Choi teaches an apparatus for detecting an IP (Internet Protocol) address of a device connected to a subnet network (col. 1 lines 19-54), comprising: a search IP address detector for detecting at least one search IP address from IP addresses which are selected every a predetermined number of IP addresses as a unit from possible IP addresses on the network (col. 2 lines 38-60); an IP address detector for detecting an IP address of a target device from the at least one search IP address

detected (col. 1 lines 55-62); and a controller for terminating a network information detection operation either when all possible IP addresses on the network have been selected or when the IP address of the target device has been detected (col. 2 lines 5-60).

As per claim 2, Choi teaches an apparatus according to claim 1, wherein the IP address detector includes at least one of: a DNS server detector for detecting an IP address of a DNS (Domain Name System) server; and a router detector for detecting an IP address of a router (col. 1 lines 55-62).

As per claim 3, Choi teaches an apparatus according to claim 2, wherein the IP address detector further includes a service detector for detecting an IP address of a device providing a service other than services of the DNS server and the router (col. 5 lines 55-65).

As per claim 4, Choi teaches an apparatus for detecting an IP (Internet Protocol) address on a subnet network including at least a DNS (Domain Name System) server. comprising: a search IP address detector for detecting at least one search IP address from possible IP addresses on the network (col. 1 lines 19-62); a DNS message communication section for sending a DNS query message to the at least one search IP address and receiving a response message to the DNS query message (col. 2 lines 5-60); and a DNS server detector for discriminating a DNS response message from the response message to detect an IP address of a DNS server originating the DNS response message (col. 1 lines 55-62 and col. 5 lines 55-65).

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As per claim 5, Choi teaches an apparatus according to claim 4, wherein the search IP address detector sends an ARP (Address Resolution Protocol) request at a time to IP addresses which are selected every a predetermined number of IP addresses as a unit from the possible IP addresses on the network, and detects the at least one search IP address from an ARP response to the ARP request (col. 5 lines 5 et seq).

As per claim 6, Choi teaches an apparatus according to claim 4, wherein the DNS quer message is a message with resetting QR bit of DNS protocol header, which is a message of at least one type selected from a group of standard query, inverse query, server status request and update (col 6 lines 5-38).

As per claim 7, Choi teaches an apparatus according to claim 4, further comprising: an ICMP message communication section for sending an ICMP echo query message to the at least one search IP address and receiving an ICMP response message to the ICMP echo query message; and a router detector for detecting an IP address of a router originating the ICMP response message (col. 11 lines 23-54).

As per claim 8, Choi teaches an apparatus according to claim 5, further comprising, an ICMP message communication section for sending an ICMP echo query message to the at least one search IP address and receiving an ICMP response message to the ICMP echo query message; and a router detector for detecting an IP address of a router originating the ICMP response message (fig 17; col. 11 lines 23-54).

As per claim 9, Choi teaches an apparatus according to claim 7, wherein the ICMP response message is one of an ICMP redirect request message and an ICMP time exceed message (fig 17; col. 11 lines 23-54).

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As per claim 10, Choi teaches an apparatus according to claim 8, wherein the ICMP response message is one of an ICMP redirect request message and an ICMP time exceed message (see fig 17-18).

As per claims 11-16, they contain the same limitations as discussed above in claims 1-10. Therefore, they are rejected under the same rationale.

Response to Arguments

Applicant's arguments filed 01/07/08 have been fully considered but they are not persuasive.

Applicants argued specifically that Choi fails to disclose or suggest a method and apparatus for identifying the IP address of a target device on a subnet. Further, Choi fails to disclose an apparatus or method configures to terminate a subnet network information detection operation either when all possible IP addresses on the subnet network have been selected or when the IP address of the target device has been detected.

Examiner submits that Applicants' interpretation of the prior art is inaccurate.

Choi is directed to Outernet DNS searching units are included in a host, a DNS server, a router where a DNS server is registered, and a router where a DNS server is not registered, allowing Internet-enabled terminals to automatically search for a DNS server in an outernet. The host creates a DNS search message and transmits it to a subnet to which the host belongs so as to receive a response message. If no response message is received from the subnet (i.e., a DNS server is not connected to the subnet), the DNS search message is transmitted to an outernet to which the host does

not belong, to which a DNS server is connected. Further, when a DNS server does not respond to a DNS search message from a host, a hop limit is increased to resend the DNS search message, thereby preventing waste of network bandwidth and easily detecting the closest DNS server (see abstract).

Choi teaches all the features described above by applicants. Specially, Choi teaches identifying the IP address of a target device on a subnet. Further, Choi discloses an apparatus or method configures to terminate a subnet network information detection operation either when all possible IP addresses on the subnet network have been selected or when the IP address of the target device has been detected (see fig 1-18; col. 2 line 5 to col. 5 line 65).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz B. Jean whose telephone number is 571-272-3937. The examiner can normally be reached on 8:30-6:00 M-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frantz B. Jean/
Primary Examiner, Art Unit 2154